IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): A hexagonal lithium-cobalt composite oxide for a lithium secondary cell, which is represented by the formula $LiCo_{1-x}M_xO_2$, wherein x is $0 \leqq x \leqq 0.02$ and M is at least one member selected from the group consisting of Ta, Ti, Nb, Zr and Hf, and which has a half-width of the diffraction peak for (110) face at $2\theta = 66.5 \pm 1°$, of from 0.070 to 0.180°, as measured by the X-ray diffraction using CuK_α as a ray source.

Claim 2 (Original): The hexagonal lithium-cobalt composite oxide for a lithium secondary cell according to Claim 1, wherein x is $0.0005 \leqq x \leqq 0.02$, and the half-width of the diffraction peak for (110) face is from 0.100 to 0.165°.

Claim 3 (Withdrawn): The hexagonal lithium-cobalt composite oxide for a lithium secondary cell according to Claim 1, wherein x is 0, and the half-width of the diffraction peak for (110) face is from 0.080 to 0.100°.

Claim 4 (Previously Presented): The hexagonal lithium-cobalt composite oxide for a lithium secondary cell according to Claim 1, wherein the packing press density of the hexagonal lithium-cobalt composite oxide is from 2.90 to 3.35 g/cm^3.

Claims 5-6 (Cancelled).

Claim 7 (Previously Presented): A positive electrode for a lithium secondary cell, which contains the hexagonal lithium-cobalt composite oxide for a lithium secondary cell as defined in Claim 1, as an active material.

Claim 8 (Original): The positive electrode for a lithium secondary cell according to Claim 7, having a mixture comprising the active material, an electrically conductive material and a binder, supported on a current collector.

Claim 9 (Previously Presented): The positive electrode for a lithium secondary cell according to Claim 8, wherein the current collector is aluminum or stainless steel.

Claim 10 (Previously Presented): A lithium secondary cell employing a positive electrode which contains the hexagonal lithium-cobalt composite oxide for a lithium secondary cell as defined in Claim 1, as an active material.

Claim 11 (Original): The lithium secondary cell according to Claim 10, wherein a cyclic or chain carbonic ester is used as a solvent for the electrolyte.

Claim 12 (Previously Presented): The hexagonal lithium-cobalt composite oxide for a lithium secondary cell according to Claim 1, which is obtained by a process which comprises dry blending a cobalt oxyhydroxide powder having an average particle size of from 1 to 20 μm

and a specific surface area of from 2 to 200 m^2/g, a lithium carbonate powder having an average particle size of from 1 to 50 μm and a specific surface area of from 0.1 to 10 m^2/g, and a powder of an oxide of metal element M having an average particle size of at most 10 μm and a specific surface area of from 1 to 100 m^2/gm, and firing the mixture at a temperature of from 850 to 1,000°C in an oxygen-containing atmosphere.

Claim 13 (Previously Presented): A hexagonal lithium-cobalt composite oxide for a lithium secondary cell, which is represented by the formula $LiCo_{1-x}M_xO_2$, wherein x is $0 < x \leqq 0.02$ and M is at least one member selected from the group consisting of Ta, Ti, Nb, Zr and Hf, and which has a half-width of the diffraction peak for (110) face at $2\theta=66.5\pm1°$, of from 0.070 to 0.180°, as measured by the X-ray diffraction using CuK_α as a ray source.

Claim 14 (Previously Presented): The hexagonal lithium-cobalt composite oxide for a lithium secondary cell according to Claim 13, which is obtained by a process which comprises dry blending a cobalt oxyhydroxide powder having an average particle size of from 1 to 20 μm and a specific surface area of from 2 to 200 m^2/g, a lithium carbonate powder having an average particle size of from 1 to 50 μm and a specific surface area of from 0.1 to 10 m^2/g, and a powder of an oxide of metal element M having an average particle size of at most 10 μm and a specific surface area of from 1 to 100 m^2/gm, and firing the mixture at a temperature of from 850 to 1,000°C in an oxygen-containing atmosphere.

DISCUSSION OF THE AMENDMENT

Claims 5 and 6 have been cancelled.

No new matter is believed to have been added by the above amendment. Claims 1-4 and 7-14 are now pending in the application. Of these claims, Claim 3 is withdrawn as directed to a non-elected species.